ABSTRACT

An electronic price label (ESL) system with register corrections is described. In one aspect, an ESL displays information relating to an item associated with the ESL. The ESL includes a plurality of registers for storing information controlling the content and formatting of the information displayed. A host computer system includes an ESL data file comprising a data image of the ESL's registers. The host computer calculates one or more sumchecks of the data image, and transmits one or more bedcheck messages including the sumchecks to the ESL. The ESL receives each bedcheck message and compares each received sumcheck with a sumcheck calculated using the information stored in the ESL's registers. If the received sumcheck matches the sumcheck calculated using the information stored in the plurality of registers, the ESL transmits a positive acknowledgement message to the host computer. If the received sumcheck does not match the sumcheck calculated using the information stored in the plurality of registers, the ESL transmits a negative acknowledgment message to the host computer, and the host computer then transmits a series of messages to the ESL updating the plurality of registers with the data image contained in the ESL data file.